OSS

VIII. ACCESS TO OSS
(JDPL Issues II-1-II-1-d; II-2-c-d; IV-30; IV-36)

Q. Please provide an overview of this section of your testimony.

A. This section addresses AT&T/WorldCom's criticisms of Verizon VA's proposed Access to OSS costs — costs incurred by Verizon VA for the benefit of the CLECs. AT&T/WorldCom's assertions are incorrect for the following reasons:

- AT&T/WorldCom fail to acknowledge that Access to OSS is a UNE, and that Verizon VA is therefore entitled under the Act to recover the costs of providing this UNE from the CLECs. Having demanded that Verizon VA incur significant costs to change its OSS to benefit the CLECs, AT&T/WorldCom's claim that they should not be required to bear these costs rings hollow.

- Contrary to AT&T/WorldCom's claim, it is irrelevant to this proceeding that Verizon VA is required by federal mandate to provide access to its OSS — indeed, this holds true for all UNEs. It is equally irrelevant to this proceeding that Verizon VA must provide access to its OSS in order to obtain permission to provide long distance service.

- AT&T/WorldCom improperly attempt to shift the costs of providing the CLECs Access to OSS to Verizon. Forcing Verizon to bear these costs would result in an improper subsidy to AT&T/WorldCom. AT&T/WorldCom and other CLECs are the cost causers, and should be required to bear the costs associated with providing them with access to Verizon's OSS.

- AT&T/WorldCom's contention that Verizon VA has not supported its claimed Access to OSS costs is baseless. AT&T/WorldCom have not pointed to any system change or functionality that was inefficient or improper. In addition, Verizon VA's Access to OSS costs are fully supported by Verizon's cost studies and testimony. In fact, the New York Public Service Commission has audited many of Verizon's Access to OSS costs and has verified that Verizon spent the money it claims.

- Finally, AT&T/WorldCom's assertion that Verizon's proposed ongoing Access to OSS costs are inflated and, in any event, should be recovered through Verizon's factors should be rejected. Verizon VA's proposed ongoing OSS costs relate solely to maintaining and upgrading the CLECs' ability to access Verizon VA's OSS, and should therefore be recovered from the CLECs. Spreading these costs among all services, as AT&T/WorldCom propose, would violate cost causation principles. Verizon VA's proposed costs, moreover, are well documented and follow standard accounting and industry practices.

A. ACCESS TO OSS COSTS SHOULD BE RECOVERED FROM THE CLECS, NOT END USERS OR VERIZON

Q. AT&T/WorldCom claim that Verizon VA's initial development costs are "competition-onset costs" attributable to the federal government mandate. Therefore, they contend, those costs should not be recovered from the CLECs. [AT&T/WorldCom Rebuttal Panel at 145.] Are they correct?

A. No. The Telecommunications Act of 1996 requires ILECs to provide Access to OSS for the benefit of the CLECs. Access to OSS is itself a UNE. Indeed, in 1996 the Commission explicitly defined Access to OSS as a UNE, at the insistence of AT&T/WorldCom and other CLECs.[163/] The Act, in turn, as well as the Commission's rules, require UNEs to be priced to cover costs.

It is simply not true, as AT&T/WorldCom argue, that Verizon VA is not entitled to recover its costs from the CLECs of providing UNEs. Furthermore, AT&T/WorldCom's argument would mean that every time Verizon VA is ordered to provide a UNE or service by this Commission or any other adjudicatory body, Verizon VA should bear the costs of this service. Such a result is plainly absurd.

[163/] *See* First Report and Order, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCC Rcd 15499, 15763 ¶ 516 (1996) ("We conclude that operations support systems and the information they contain fall squarely within the definition of 'network element'"); *see also id.* ¶505-28; Telecommunications Act of 1996, 47 U.S.C. § 153(a)(45).

Q. Do you agree with AT&T/WorldCom's proposal that each party should bear its own costs for Access to OSS? [AT&T/WorldCom Rebuttal Panel at 147.]

A. No. The CLECs are the cost-causers and thus should bear those costs. Indeed, Verizon VA would not have modified its OSS to provide access if it had not been required to do so for the CLECs' benefit, and if the CLECs left the market, Verizon would not continue to carry these costs.

In addition, because Verizon VA's modifications were determined by the CLECs' own requirements, the CLECs should bear the costs of the demands they have made and continue to make by virtue of their input in the Industry Change Control process concerning Verizon VA's OSS. The parties that access Verizon VA's OSS should bear the costs to ensure that they do not abuse the system or demand functionalities that are not efficient to develop.

Verizon VA further explains in the testimony of Drs. Shelanski and Tardiff how its Access to OSS costs comply with forward-looking costing principles.

Q. To support their argument that each party should bear its own OSS costs, AT&T/WorldCom imply that CLECs are required to develop

their own sophisticated systems to interface with Verizon VA's systems. [AT&T/WorldCom Rebuttal Panel at 146] Is this fact relevant?

A. No. The Act plainly requires that the ILECs be permitted to recover their costs of providing UNEs to CLECs. The Act says ***nothing*** about the CLECs' own costs. It is therefore immaterial to this cost proceeding that AT&T/WorldCom have also spent money developing OSS. Verizon VA modified its existing OSS to benefit the CLECs. Thus, the fact that the CLECs must spend some of their own money in order to obtain this benefit does not mean that Verizon VA should not be compensated for its costs. That would be akin to arguing that because a person had to spend money to drive to the theater, the movie should be free.

Moreover, AT&T/WorldCom's claim that CLECs have spent many millions of dollars on their own OSS is misleading. For an investment of less than a couple of thousand dollars (for a personal computer and Netscape Navigator), a CLEC can electronically interact with Verizon VA through its robust Web GUI. While the CLECs will incur additional costs to train their employees in the use of this interface, or costs to develop additional software, these costs pale in comparison to the costs Verizon VA has incurred to provide access to its OSS.[164/]

[164/] AT&T/WorldCom have chosen to deploy more sophisticated (and costly) systems that provide application-to-application interfaces with Verizon's

Q. In a footnote, AT&T/WorldCom state that Verizon has misidentified the cost causers since it does not distinguish between resale and unbundled network elements. Is that a valid concern? [AT&T/WorldCom Panel Rebuttal at 149.]

A. No. Both resale and UNE are in the denominator of all of the calculations. This makes each category of customer equivalent with respect to Access to OSS, and neither party is harmed. If the costs had been broken out into resale-only, UNE-only and combined categories, then the denominators of demand would also have to have been broken out. When the costs are divided by their relevant demands, the costs per unit would be very similar. Performing the study with the CLECs and Resellers considered together eliminated these unnecessary additional steps. Moreover, it is important to recognize that many carriers will have a strategy that makes use of a combination of UNEs and resale, and that the distinction between UNE and resale has started to blur with the advent of the UNE platform.

Q. AT&T/WorldCom claim that the California Public Utilities Commission and the New York Public Service Commission have concluded that ILECs' OSS gateway costs should not be recovered

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OSS. Their business decision to choose this method of interacting with Verizon should not affect Verizon's ability to recover access to OSS costs.

through charges to CLECs. Please comment on those commissions' rulings. [AT&T/WorldCom Rebuttal Panel at 150-51]

A. These cases are inapplicable. The California Commission was addressing an entirely different cost study presented by another ILEC. Thus, the California Commission's finding that the ILEC failed to demonstrate that its proposed Access to OSS costs did not include changes to retail systems has nothing to do with Verizon VA's cost study in this proceeding. Verizon has plainly excluded these costs. The New York Public Service Commission decision is likewise immaterial. The New York Commission found that Verizon had failed to demonstrate that it had met a specific New York Commission-imposed merger condition relating to the Bell Atlantic/NYNEX merger, and therefore denied recovery of Access to OSS costs on that basis.

Q. AT&T/WorldCom contend that allowing Verizon VA to recover Access to OSS costs would give Verizon no incentive to select the most efficient means of complying with its obligations, and that the only way to encourage efficiency is to force Verizon to bear its own costs. Do you agree? [AT&T/WorldCom Rebuttal Panel at 152-53.]

A. No. AT&T/WorldCom's assertion violates the Act and is absurd. They point to *no* evidence to demonstrate that Verizon VA has acted inefficiently, or, as they assert, intentionally spent money just to increase the CLECs' costs.[165/]

Nor does Verizon VA have such an incentive. For example, since the CLECs and Resellers have not yet paid for these Access to OSS costs, cash flow considerations alone would cause Verizon to act efficiently.

Verizon's expenditures in developing Access to OSS were reasonably and efficiently spent. Verizon explained the system changes required to provide CLECs with access to its OSS in its direct testimony.[166/] For example, Verizon changed its user interface from dial-up access to a Web/Internet-based interface. This eliminated the need for lengthy long-distance calls, permitted faster access, and standardized the interface. Verizon moved quickly to support updated versions of its Local Service Ordering Guidelines (LSOG) so CLECs could take advantage of the latest functionality developed and agreed upon by the Operations and Billing Forum (OBF). Verizon also worked closely with numerous CLECs to implement EDI connectivity, allowing CLECs to integrate their OSS with Verizon's pre-ordering and ordering systems. All of these improvements benefited CLECs by making pre-ordering and ordering processes faster, simpler, and more compatible with CLECs' systems. In

165/ *See* AT&T/WorldCom Rebuttal Panel at 146, 152-53.
166/ *See* VZ-VA Panel Direct at 254-270.

addition, Verizon implemented monthly Industry Change Control meetings/conference calls for Verizon to explain upcoming OSS changes in great detail and to garner CLEC input about identifying and prioritizing new changes/enhancements to OSS.

AT&T/WorldCom fail to explain what incentive Verizon VA could have to implement Access to OSS inefficiently. The Commission should disregard AT&T/WorldCom's baseless and unspecified attacks.

Q. AT&T/WorldCom contend that Verizon has not shown that development of Access to OSS was an "unusual burden" or "out of the ordinary course of business." Is this correct? [AT&T/WorldCom Rebuttal Panel at 158.]

A. No. AT&T/WorldCom's claim that Verizon VA's monumental effort to provide CLECs with access to Verizon's OSS was part of Verizon VA's normal business activities is wrong. As Verizon VA described in its Panel Direct,[167] the effort to change/modify Verizon's OSS was anything but a normal business activity.

Thus, AT&T/WorldCom's contention that all of these costs should simply be recovered, like other expenses, in Verizon VA's factors should

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[167] *See id.* at 254-72.

be rejected. These costs were incurred solely for the benefit of CLECs. Spreading these costs among *all* Verizon services would be inappropriate.

Moreover, Verizon was forced to set aside many projects that it otherwise would have undertaken and benefited from during the period from 1996 to 1999. In the first few years following the Act, Verizon necessarily channeled personnel and resources to the massive effort to adapt its systems to the new regulatory mandate as quickly as possible. Other projects then in the works or planned for that period, such as product stimulation projects, technology trials, expense reduction programs, and process improvement initiatives, were slowed, discontinued, or deferred. The incremental cost savings or incremental revenues or other benefits associated with those projects were thus deferred or eliminated as well. Once the development of Access to OSS was completed, Verizon's Information Management and Network personnel were able to return to other projects.

Thus, the fact that Verizon VA does not plan to reduce its workforce in the Information Management and Network organizations, and that it will now focus on these diverted projects has nothing to do with whether the CLECs should bear the costs of providing access to Verizon VA's OSS.

Q. As an alternative to requiring the CLECs to bear Access to OSS costs, AT&T/WorldCom propose a surcharge of approximately $.08 on all end users. Do you agree with their proposal? [AT&T/WorldCom Rebuttal Panel at 147-50.]

A. No. First, this Commission lacks jurisdiction in this case to impose a surcharge on Virginia end users. This case was delegated to the Commission solely to determine the appropriate rates, terms and conditions governing Verizon VA's interconnections agreements with AT&T/WorldCom and Cox.

As explained above, Verizon VA recommends that the cost causers — the CLECs — bear these costs as required by the Act. AT&T/WorldCom's proposal would unfairly spread costs caused by (and implemented solely for the benefit of) CLECs to all users. In effect, it would constitute a subsidy for CLECs. The only difference between a surcharge on all users and the proposal for Verizon VA to bear its own costs is *who* would be subsidizing the CLECs.

Q. Do you agree with AT&T/WorldCom's assertion that it is appropriate to impose a surcharge on all end users because they benefit from competition? [AT&T/WorldCom Rebuttal Panel at 148.]

A. No. There is no reason to make other end users pay for a UNE provided to CLECs. AT&T/WorldCom's contention that all users can appropriately be charged because all customers benefit from competition is too tenuous to justify such a subsidy.

Drs. Shelanksi and Tardiff further address why it is inappropriate to assess Access to OSS costs on end users.

Q. AT&T/WorldCom claim their proposal to charge all end users is analogous to the treatment this Commission has prescribed for number portability costs. Is their analogy appropriate? [AT&T/WorldCom Rebuttal Panel at 151-52.]

A. No. Unlike Access to OSS costs, the Commission specifically interpreted Congress's competitively neutral mandate to require that number portability costs be assessed on end users:

> Pricing number portability on a cost-causative basis could defeat this purpose because the nature of the costs involved with some number portability solutions might make it economically infeasible for some carriers to compete for a customer served by another carrier. Consequently, the Commission interpreted Congress's competitive neutrality mandate to require the Commission to depart from cost-causation principles when doing so is necessary to ensure "that the cost of number portability borne by each carrier does not affect significantly any carrier's ability to compete with other carriers for customers in the marketplace."[168/]

[168/] FCC Third Report and Order, *Telephone Number Portability*, 13 FCC Rcd 11701, at ¶ 41 (1998).

Congress did ***not*** impose a similar "competitive neutrality mandate" for UNE costs, including Access to OSS costs. Indeed, the Commission has plainly held that the Act's number portability requirement does not apply to other costs associated with competition.[169]

Access to OSS costs, moreover, do not raise the same issue as number portability costs. The charges that Verizon VA proposes to recover its costs do not disadvantage any carrier relative to another carrier, because they are fixed charges that are tied to the number of resold lines, UNE loops, and/or UNE platforms a CLEC purchases. AT&T/WorldCom have provided no justification for departing from ordinary principles of cost causation.

Q. AT&T/WorldCom also suggest that Verizon VA "stands to benefit significantly from fulfilling the requirements of the competitive checklist for entry into the interLATA market," including providing Access to OSS. Therefore, they contend, passing through the costs to its own local exchange customers "is little or no burden on Verizon

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[169] First Report and Order and Further Notice of Proposed Rulemaking, *Telephone Number Portability*, 11 FCC Rcd 8352, ¶ 209 (1996) ("'competitively neutral' standard in section 251(e)(2) applies only to number portability costs, and not to recovery of carrier-specific, non-number portability-specific costs, such as upgrades to SS7 and AIN technologies. This interpretation is borne out by the plain language of the statute, which only requires that telecommunications carriers bear the costs of number portability.")

compared to the advantage of interLATA entry." [AT&T/WorldCom Rebuttal Panel at 149.] Do you agree?

A. No. The benefits that Verizon VA would obtain from long distance entry are irrelevant to this proceeding. The Act requires that Verizon VA provide unbundled network elements — including Access to OSS — to CLECs, and requires that CLECs pay for these elements. Taken to its logical extreme, AT&T/WorldCom's argument would mean that Verizon VA should not recover the costs of providing *any* unbundled network elements because Verizon VA must provide them as a condition to long distance entry. Such a result is plainly absurd and inconsistent with the Act.

Q. Assuming it were appropriate to impose such a surcharge on all end users, have AT&T/WorldCom calculated the surcharge correctly?

A. No. AT&T/WorldCom's end user surcharge calculation excludes ongoing Access to OSS costs, and other costs consistent with AT&T/WorldCom's positions in this case (*i.e.*, cost of capital and depreciation assumptions). If only the ongoing Access to OSS costs are added back in, the end user surcharge would increase to $.19 per end user.

B. VERIZON VA'S ACCESS TO OSS COSTS ARE FORWARD-LOOKING

Q. AT&T/WorldCom claim that the Verizon VA OSS cost study is not forward-looking because it measures actual, incurred costs rather

than forward-looking costs. [AT&T/WorldCom Rebuttal Panel at 153-54.] What is Verizon VA's response?

A. AT&T/WorldCom are wrong. AT&T/WorldCom have a distorted notion of "embedded" costs. Although a portion of Verizon VA's OSS costs are based on actual costs, they are not embedded costs, as the term has been defined in cost proceedings under the Act. These costs were incurred after and as a direct result of Verizon's unbundling obligations under the Act.

As stated in the Panel's direct testimony, Verizon VA's costs are forward-looking because they reflect the most forward-looking technology currently deployed to provide CLECs access to Verizon VA's OSS. The fact that a portion of these costs were incurred in past years does not mean that these costs are not forward-looking; rather, they merely reflect regulatory timing. Indeed, AT&T/WorldCom and other CLECs could simply delay regulatory proceedings like this one while Verizon spends millions of dollars, and then argue that these costs have already occurred and therefore are not forward-looking. This proceeding is about determining whether the costs Verizon VA incurred to provide CLECs with Access to OSS as required by the Act were forward-looking at the time they were incurred. The answer is yes.

Moreover, the fact that some of these costs were incurred in 1996-1999 make Verizon VA's cost study more accurate because the costs are based on actual data rather than estimates. Significantly, AT&T/WorldCom argue in connection with Verizon VA's NRC study that Verizon VA estimates must be validated with actuals. Verizon VA's OSS development costs reflect those actual costs as evidenced by time reports and contractor invoices as well as documented by budgets and vendor contracts.

Verizon VA further addresses in the testimony of Drs. Shelanski/Tardiff AT&T/WorldCom's claims that Verizon VA's Access to OSS costs reflect embedded costs.

Q. AT&T/WorldCom claim that Verizon VA's Access to OSS cost studies should have assumed an entire new system designed to accommodate multiple providers. [AT&T/WorldCom Rebuttal Panel at 158.] Are they correct?

A. No. To suggest that TELRIC requires the entire infrastructure to be reconstructed including brand-new motor vehicles, the latest ergonomic designs in furniture, or an entire reconstruction of the computer systems is an extreme interpretation that likely would have resulted in exorbitant costs. Such an approach is not the most efficient way of providing UNEs.

Moreover, if one were to accept AT&T/WorldCom's suggestion, then the costs associated with the Access to OSS UNE would be the difference between the costs of designing, developing and implementing brand new OSS that can accommodate multiple providers minus the costs of designing, developing and implementing brand new OSS that can accommodate a single provider. The result would be just the costs of designing, developing and implementing that which is needed for the Access to OSS UNE. This is essentially what Verizon VA has done with one key difference. Rather than going through the hypothetical exercise of designing two brand new sets of systems, Verizon VA has more directly identified the costs of designing just the systems, gateways, interfaces and functionalities needed for the CLEC/reseller Access to OSS, based on the existing state-of-the-art systems currently deployed.

C. VERIZON VA'S PROPOSED ACCESS TO OSS COSTS ARE FULLY SUPPORTED BY THE RECORD

Q. Do you agree with AT&T/WorldCom's claim that Verizon VA's support for its proposed Access to OSS charge in this proceeding is insufficient for the parties to verify the claimed costs or to determine their appropriateness? [AT&T/WorldCom Rebuttal Panel at 153, 154-59.]

A. We explained in our direct testimony, and explain further below, how Verizon VA calculated the costs it seeks to recover, and explained the various modifications to Verizon's systems that were undertaken. It is significant that AT&T/WorldCom do not point to a single system, feature, or change that they think was unnecessary or inappropriate. Throughout development of access to Verizon's OSS, AT&T/WorldCom and other CLECs were continuously involved in discussions, collaboratives, and regulatory proceedings with Verizon concerning the OSS modifications. Indeed, Verizon VA has tailored its OSS to meet the specific requirements of individual CLECs.

For example, at AT&T's request Verizon has developed a capability which allows the CLEC to simply identify which features its end customer wants on a migration from Verizon.[170] With this functionality, the CLEC is not required to re-input the customer's existing data on the Local Service Request (LSR). Verizon simply "carries" this information to each CLEC form. In addition, AT&T has requested Common Object Request Broker Architecture (CORBA) as the pre-ordering interface standard. CORBA is an alternative to Electronic Data Interchange (EDI) to communicate the same information and business rules for pre-order functions. While the information is the same, the format of the data is different between EDI and CORBA. Now, however, AT&T seeks to avoid paying for such modifications made at its request.

AT&T/WorldCom do not in any way support their claim that Verizon VA's costs are overstated; rather, as with many of Verizon VA's

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[170] A migration takes place when the end user switches from Verizon VA to a CLEC.

proposed charges, they offer only generic, unsubstantiated attacks. Verizon's costs are adequately supported and reviewable because they are derived from standard accounting management practices. Those practices, along with Verizon's wage/bill and voucher verification and approval processes, change control process, and internal project controls, ensure the accuracy and reasonableness of the overall work activities and expenditures associated with OSS.

Finally, Verizon's Data Center, Network, and Distributed Resources (DCNDR) group, which developed the hardware requirements and associated costs related to Access to OSS, has achieved ISO 9002 certification, which signifies a high level of quality assurance and efficiency for systems production, installation and servicing.

Q. Have Verizon's Access to OSS costs been audited by any commission?

A. Yes. The New York Public Service Commission is in the process of auditing Verizon's Access to OSS costs. Indeed, it has already completed its review of Verizon's 1996-1999 costs, and found that Verizon had in fact incurred these costs.[171] This audit has continued even past the 1999 point at which the Company assumed the UNE to be essentially complete and ceased including development costs in its study.

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[171] Attachment T.

Q. Please explain how Verizon identified the one-time costs of development of Access to OSS.

A. Verizon utilized its existing financial reporting processes and systems to track Access to OSS development costs, which are tracked by project to the Director level. For 1996, 1997, 1998, and 1999, Verizon identified the amounts actually spent on development of Access to OSS. Verizon used expense reports created for the Partnership Initiative Profile (PIP) process in Verizon East — North and the Keep Cost Order (KCO) process in Verizon East — South, which are described below. The expenses were identified both by type (*e.g.*, wages, benefits, contractor costs) and by responsibility codes, which showed which organizations (*e.g.*, Engineering, Network) incurred the expenses.

Verizon identified actual expenditures by the IS and Network organizations to provide the functionalities necessary for Access to OSS, as described in the Verizon Panel Testimony.[172] For work performed by vendors, Verizon simply totaled the costs charged by these vendors. Vendor costs are kept in check both by Verizon's internal controls and by the ongoing relationships with Verizon that are valuable to those vendors. For work performed by Verizon employees, Verizon used the expenses reported in its financial systems, which calculate the number of hours worked from employee time sheets multiplied by the appropriate labor

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[172] *See* VZ-VA panel Direct at 254-70.

rates. Most of the work related to developing Access to OSS was performed by the IS and Network organizations.

Verizon also incurred additional costs associated with time spent by other organizations to develop the process requirements for the OSS, and for other common activities. These additional costs are specifically reported in Verizon East — North, but not in Verizon East — South. Verizon was able to estimate these costs for Verizon East — South by examining Verizon East — North's ratio of costs between the Verizon East — North IS and Network organizations and the other pertinent Verizon East — North organizations on a project-wide basis. This calculation is contained in VZ-VA CS, Vol. VIII, Part F-5, Workpaper 4, p. 1, VZ-VA 003085.

The wage portion of these costs were loaded for benefits and loadings. In particular, it is worth noting that the employee time sheets and IS actuals were loaded for benefits and payroll taxes using a benefit factor derived from a Special IS Study for each of the years from 1996 to 1999. Those studies were produced in response to a discovery request, AT&T/WorldCom 6-50, and are attached hereto as Attachment U.

Development expenses that are included as part of the ongoing maintenance calculations (discussed below) for recovery were identified and subtracted. The actual expenses for 1996-1999 were then adjusted for productivity and inflation. Expenses identified were projected to what would be incurred at a common point in time — January 1, 2001 — for the same activities, and were amortized over 10 years. Finally, expenses that were recovered in the wholesale discount were identified and subtracted.

Q. Please explain the PIP and KCO processes in more detail.

A. With respect to Access to OSS costs, the PIP process was implemented by Verizon East — North (seven states comprising the former NYNEX territory); the KCO process was implemented by Verizon East — South (seven states comprising former Bell Atlantic territory). Both processes were implemented to allocate costs among the operating telcos in each region so that there would be a centralized entity for software development and information systems work, and so that these centralized costs would be reasonably allocated among operating telcos.

A PIP is a statement of a particular activity (project or function) and its associated costs and benefits. It is used for budget and tracking purposes to ensure accurate billing in Verizon East — North. A PIP is comprised of job numbers, which are used to track costs by specific job activities.

The PIP process established expense reporting requirements to comply with the Commission's cost rules for non-regulated activities.[173/] The expense reports are subject to an annual independent audit, in accordance with the Commission's requirement.

A KCO process tracks the total costs of a particular project, but does not apportion the costs to different accounts.

Q. Please explain how the total expenses were amortized over 10 years.

A. In order to spread the total one-time development expenses over 10 years, a factor representing the Continuous Annuity from a Present Amount, as defined in *Engineering Economy: A Manager's Guide to Economic Decision Making*,[174] was multiplied against the costs that have been expressed in terms of January 1, 2001 dollars. A Verizon East — region-wide average UNE cost of money of 12.95% was used as the interest rate for amortizing the expenses.

Q. AT&T/WorldCom argue that there may be some interfaces and gateway systems that are interim and that Verizon is therefore not

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173/ Report and Order, Separation of Costs of Regulated Telephone Service from Costs of Nonregulated Activities, 2 FCC Rcd 1298 (1987).

174/ *See* AT&T Construction Plans Department, Engineering Economy: A Manager's Guide to Economic Decision Making, Appendix B (3d ed. 1977).

entitled to recover the costs of creating/modifying these systems. [AT&T/WorldCom Rebuttal Panel at 161.] Are they correct?

A. No. AT&T/WorldCom appear to misunderstand normal system development. It is well accepted in the industry that systems have "life cycles" and software "releases." Verizon VA continually enhances its systems capability by incorporating new functionality or technology in its OSS. Virtually all systems and system functionalities could be deemed to be "interim" in that eventually they will be enhanced or replaced.

In addition, many of the "enhancements" incorporated in the interfaces and gateway systems are a direct result of CLEC requests — via Collaborative venues like the New York Collaborative meetings as well as Verizon's own Industry Change Control forum — and the requirements of the national standards bodies, like the OBF.

Microsoft's Windows software is a good example of normal software/system development. Microsoft released its original version of Windows in 1987. The most recent versions, Windows 98, Windows 2000, Windows Millennium Edition, Windows XP, incorporate functionality unheard of in 1987. Microsoft built upon its prior versions of Windows and incorporated Internet capabilities to develop the most technologically advanced software possible. That does not mean that

Microsoft will stop development with Windows XP nor that the prior versions of Windows were "throwaway."

Verizon VA system development will continue well into the foreseeable future and will continue to build on the development presented in this case. Verizon VA should, therefore, recover the costs of providing these capabilities to the CLECs.

Q. How have you ensured that the costs have been prudently and reasonably incurred?

A. Contrary to AT&T/WorldCom's claims, Mr. Minion has not conceded that he failed to review the reasonableness of Verizon VA's proposed Access to OSS costs. Mr. Minion did in fact review the overall reasonableness of the Access to OSS project. Among other things, he reviewed the accounting procedures, internal cost controls, and overall project management associated with the Access to OSS project.

The Maryland interrogatory cited by AT&T/WorldCom has been taken out of context. While it is correct that Mr. Minion did not examine the precise costs incurred and attributed to *each* system change or functionality required for the Access to OSS project, no such micro-level review of these costs is necessary given the accounting procedures and tracking processes Verizon used to implement this project. These procedures are discussed further above. It is therefore entirely appropriate to review these costs from a macro level on a project basis.

D. VERIZON VA'S ONGOING MAINTENANCE COSTS ARE APPROPRIATE

Q. Please explain the ongoing costs developed by Verizon in its cost study.

A. Verizon's cost study includes two categories of ongoing costs: (1) the annual capital and operating costs associated with computer *hardware* used for Access to OSS; and (2) *software* maintenance. Both are recurring costs because Verizon must continue to maintain and update hardware and software as long as it must provide access to OSS.

1. Computer Hardware

Q. Please explain how Verizon identified the costs of computer investments for hardware associated with providing access to OSS.

A. Verizon separately identified the costs for the two kinds of hardware associated with providing access to OSS. The first is what is known as mid-range equipment. This category includes servers, routers, and other equipment for providing the actual gateway functionality; Verizon purchased such equipment and dedicated it exclusively to providing access to OSS. For this mid-range equipment, Verizon identified the actual expenses, based on vendor invoices, for 1996 and 1997 and provided budget estimates for 1998 and 1999. For 1998, the year in which the cost study was first developed, Verizon used a combination of actual expenses for a substantial portion of the year, and estimates for the remainder of the year. For 1999, Verizon included some identified, planned purchases and some unidentified but budgeted purchases.

Verizon did not identify actual expenses for 1999 due to an accounting change. In 1998, the American Institute of Certified Public Accountants issued a Statement of Position announcing a change in accounting practice that required software costs to be booked as capital costs rather than ordinary expenses. Effective January 1, 1999, Verizon adopted the new accounting practice; therefore, computer-related expenses could not be tracked for 1999 in the same manner as for previous years. Because hardware and software expenses are tracked with the same project numbers, the accounting change for software costs made it difficult to separately identify during the 1999 time period the amounts for software versus computer hardware.

In an effort to test the reasonableness of its cost studies, Verizon looked at total 1998 and 1999 actual purchases and compared them to budgeted figures. Verizon VA concluded that these actual purchases were consistent with the budgeted estimates.

The second kind of hardware is mainframe equipment, the costs of which necessarily are allocated differently. Unlike mid-range equipment, which is dedicated to access the OSS, mainframe equipment is used for systems serving Verizon itself as well as resellers and UNE Purchasers, and is bought in bulk. This is particularly the case for storage capacity (gigabytes of memory or GIGS) and processing capacity (millions of instructions per second or MIPS). Because of the "lumpy" nature of the asset (*i.e.*, capacity is bought in certain designated sizes,) costs must be calculated on a capacity basis.[175] Verizon purchases equipment based on its total requirements and divides the total cost, including all of the associated hardware, such as power requirements and coupling facilities, by usable capacity. Verizon attributes to all projects within a given year the same costs per GIG and per MIPS based upon the total corporate budget. For purposes of the cost study filed in this proceeding, however, Verizon VA took a conservative approach and adjusted the mainframe equipment costs to the 1999 rates, which will under-recover the actual costs for 1996, 1997, and 1998 because computer equipment costs fell substantially during that period.[176]

[175] If Verizon had assumed that such equipment was dedicated to the CLECs, Verizon would have to purchase substantial excess capacity, which would be extraordinarily inefficient.

[176] See VZ - VA Panel Direct at 286.

These hardware requirements and associated costs were developed by Verizon's Data Center, Network, and Distributed Resources (DCNDR) group, adhering to a rigorous process and set of guidelines. Indeed, the DCNDR group has proven itself to be cost-effective. As noted above, it has achieved ISO 9002 Certification, which means that it meets the international quality measurement standard specific to quality assurance for systems production, installation and servicing. This certification is granted by an independent standards organization based on the recipient's maintaining certain criteria, processes and controls.

Q. Do you agree with AT&T/WorldCom's contention that Verizon VA should have used 2001 or 2002 prices for computer investments rather than the 1999 prices? [AT&T/WorldCom Rebuttal Panel at 167.]

A. No. First, Verizon's study prices out the mainframe equipment at the 1999 level because Verizon made the assumption that the initial deployment of access of OSS was completed at that time. This assumption in itself is conservative, since significant amounts of equipment were placed in the preceding years.

AT&T/WorldCom's suggestion that Verizon use even later cost information is nothing more than an attempt to further reduce the costs of this UNE below what Verizon is actually incurring to provide the UNE. Verizon is providing the UNE using equipment placed during or before

1999. As a result, the depreciation expenses and return requirements that Verizon is actually incurring reflect the installed investment from 1996-1999, not some hypothetical investment in the future. Unlike other UNEs that potentially require additional capital expenditures, the Access to OSS UNE is not expected to require additional capital over the life of the study period. As a result, the capacity costing approach employed by Verizon, using the investment associated with the actual installed equipment, is the appropriate long-run investment to study.

Second, Verizon VA's Response to AT&T/WCOM 7-49[177/] shows that the recent investment per MIPS and GIG is not drastically different than what has been used in Verizon's cost studies. The rapid decline previously experienced with computer hardware has slowed.

Q. Do you agree that it is difficult to isolate the computer investment attributable to competitor demand? [AT&T/WorldCom Rebuttal Panel at 163.]

A. No. Mid-range equipment is dedicated to competitor demand, so the investment attributable to this demand is clear.

With respect to mainframe equipment, attributing the capacity used by CLECs is not especially difficult. Verizon attributed this capacity by

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177/ Attachment A.

taking the baseline growth requirements of the systems that house applications used to provide access to OSS, and then overlaying the incremental capacity requirements resulting from increased demand and functionalities attributed to resellers and UNE purchasers.

2. Software Maintenance

Q. How did Verizon calculate ongoing software maintenance costs?

A As Verizon VA has explained previously,[178] Verizon developed ongoing maintenance costs by assuming that these costs were 15% of initial program development costs.[179] This estimate is based on independent industry sources, which provide that most of a software system's life cycle costs are associated with maintenance, rather than development.

Given that industry experts estimate the ongoing maintenance costs of software to average in the range of one-quarter to two-thirds of the initial development cost each year,[180] Verizon's choice of 15% is quite conservative.

Q. AT&T/WorldCom also contend that Verizon VA does not track maintenance costs separately from other OSS expenditures, so it is not

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[178] *See* VZ-VA Panel Direct at 288-93.

[179] To avoid double-recovery, VA subtracted 15% from the total development costs for 1997, 1998, and 1999, because Verizon VA began providing access to OSS, and thus maintaining the software, after the initial development in 1996.

[180] *See* VZ-VA Panel Direct at 292.

clear how Verizon VA can attribute such costs to competitors. What is Verizon VA's response? [AT&T/WorldCom Rebuttal Panel at 161.]

A. As explained in the Verizon Panel Direct and above, Verizon VA calculated maintenance costs as a percentage of the initial development costs associated with providing the CLECs access to OSS. Because Verizon VA calculated the ongoing maintenance costs as 15% of the initial development costs, *that figure reflects only expenditures related to providing access to OSS,* for the same reasons explained above regarding the accuracy of Verizon's development costs.

Q. AT&T/WorldCom contend that some double-counting may exist with respect to reported access to OSS costs and recurring rate elements. Are they correct? [AT&T/WorldCom Rebuttal Panel at 157-58.]

A. No. There is no double recovery of costs. There are two fundamentally distinct sets of expenses that deal with OSS. The first set of expenses includes the costs associated with the *existing functionalities of the underlying OSS* (*e.g.*, maintaining the inventory of physical cable pairs and their assignment status). These types of expenses are part of those recurring costs Verizon VA expects to incur when it offers unbundled network elements (other than access to OSS). Verizon uses annual cost factors derived from a historical year's relationships (adjusted to be forward-looking) based on existing equipment and functionality in order to facilitate the estimation of the future costs. These costs do not represent recovery of any previously incurred expenses; rather, they represent the recovery of estimated future costs.

The second set of expenses includes those Verizon VA incurs to create functionalities and interfaces, and to make *modifications to the OSS that permit the CLECs to access the OSS* and the data contained within them. This second set represents a different set of expenses, namely, costs that are incurred specifically to meet the needs of the CLECs under the Act, and that should be recovered from the CLECs.

The fact that the basis for some of these estimates consists of previously incurred costs is simply a matter of assigning the cost recovery obligations to the appropriate users. In no way do these previously incurred costs invalidate the *relationship* expressed via the ACFs as to the proper estimation of future expenses associated with the first set of expenses. The need for the Access to OSS development effort merely served to temporarily redeploy resources away from the normal course of business to conduct the regulatory-required activity. Once that regulatory-required activity has been completed (and it has), the normal course of business can be (and has been) resumed.

Q. How have you ensured that there is no double-counting between the recurring rates of other UNEs and the Access to OSS UNE?

A. As shown on tab "WP8 — OSS Adjustment," in file "Part G-8 — VZ2000Wothsupt Updated 2" in folder "Part G-8 Other Support Factor" in folder "VA Part G Factors_Support" in the "VA Common Inputs" folder on CD#2 provided in Verizon VA's initial filing, Verizon VA removed nearly $48 million from the development of the Other Support ACF. This represented a combination of ongoing investment-related costs and the ongoing-software-maintenance costs.

Q. AT&T/WorldCom complain that Verizon VA has not proposed any mechanism to true-up recovery based on actual recovery. How do you respond? [AT&T/WorldCom Rebuttal Panel at 166.]

A. Verizon VA's approach reflects normal rate development practices. If the estimate of demand is indeed *under*stated, then there would be some *over*-recovery. If the estimate of demand is indeed *over*stated, then there would be some *under*-recovery. Either situations could occur. The lack of a true-up is designed to give finality to the rates that are set. In fact, CLECs — including AT&T/WorldCom — have complained in the past about the uncertainty implicated by true-up mechanisms.

Q. AT&T/WorldCom also challenge Verizon VA's proposed recovery of software maintenance expenses. They contend that such maintenance

is "a normal part of Verizon's business and should be treated as such." What is Verizon VA's response? [AT&T/WorldCom Rebuttal Panel at 160-61.]

A. Again, AT&T/WorldCom are wrong. Maintenance of systems that enable access to OSS are not and never have been "a normal part of Verizon's business." As explained above, Access to OSS costs are costs that Verizon VA would not have incurred absent the federal mandate to provide this specific UNE for the benefit of CLECs, and if CLECs were to leave the market, Verizon VA would not continue to maintain the necessary software for such access. For these reasons, Verizon VA was careful to back out software maintenance expenses from its factors. As explained above, Verizon VA removed nearly $48 million, representing a combination of ongoing investment-related costs and the ongoing software maintenance costs, from the development of the Other Support ACF.

Q. Please respond to AT&T/WorldCom's claim that Verizon VA should recover its ongoing OSS costs through its annual cost factors, as it captures normal recurring OSS expenses. [AT&T/WorldCom Rebuttal Panel at 163.]

A. While normal recurring OSS expenses associated with all of Verizon's operations are properly attributed to all Verizon customers (retail and wholesale), ongoing Access to OSS costs are associated only with provisioning UNEs and resale. Therefore, costs associated with Access to

OSS should be recovered directly from CLECs based on TELRIC costs. Recovery of ongoing access to OSS costs through ACFs would have the effect of spreading the wholesale-only costs associated with the particular access to OSS UNE over all Verizon users, including retail customers. The Commission should reject this approach.

Q. AT&T/WorldCom recommend that the Commission, instead of approving the "ongoing" portion of Verizon VA's proposed Access to OSS charge, adopt an "other support" factor that accounts for ongoing costs. They propose an "other support factor" of 0.0456. Would that factor appropriately recover Verizon VA's Access to OSS costs? [AT&T/WorldCom Rebuttal Panel at 164.]

A. No. Access to OSS is a UNE. The ongoing costs associated with the functionalities needed solely by CLECs and Resellers should be borne by the CLECs and Resellers. Including these costs in the "other support" factor would spread the costs across all users of Verizon's network — including retail customers, CLECs, Resellers, and interexchange carriers. Such a result is antithetical to the concept of cost causation and TELRIC pricing of UNEs.

AT&T/WorldCom proposed method of calculation is also incorrect. Their proposed factor omits significant costs. Rather than reflect the ongoing costs as shown in Verizon's cost studies (VZVA

004959) of nearly $48 million, AT&T/WorldCom have concocted a method whereby they deduct as an OSS adjustment $128 million (if the Commission were to rule that ongoing access to OSS should not be in the other support factor) or $94 Million (if the Commission were to rule that ongoing Access to OSS should be included in the other support factor). Far from accurately reflecting the ongoing costs associated with the Access to OSS UNE, AT&T/WorldCom modify their outrageously inappropriate adjustment to a merely inappropriate one by effectively crediting approximately $34 million back into the ACF.

Q. What is Verizon VA proposing with respect to Access to OSS costs?

A. The Commission should adopt Verizon VA's proposed Access to OSS costs, and should conclude that the CLECs, not Verizon or end users, should bear these costs.